That Dragon, Cancer: Contemplating life and death in a medium that has frequently trivialized both

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ABSTRACT
As a game mechanic, death has primarily been used to punish players for mistakes and failure. Over-reliance on screen-death possibly constitutes one of the most dated aspects of digital games as a contemporary medium. This paper considers why this artefact of historical forms and content persists (Zimmerman, 2007), and in doing so, how it continues to trivialize the otherwise irreversible nature of the cessation of human life, and the sense of loss and grief experienced by those who are close to the deceased. In particular, this paper discusses the game *That Dragon, Cancer* (Numinous Games, 2016) for the manner in which it contributes towards a redefinition of the relationship between gaming and death. It is argued that the game allows the medium to tackle contemporary Western issues associated with the experience of death, and avoids contributing further to the 'emotional invigilation' (Walter et al., 1995) of death via its re-appropriation as an entertainment form. *That Dragon, Cancer's* status as a game is also commented on, and defended, in terms of the player experience it offers.

Keywords
post-self, social death, screen-death, personal experience games, *That Dragon, Cancer*.

INTRODUCTION
Even though the profound essence of war is death (Silcock *et al*., 2008), the treatment given to war within entertainment mediums stands in stark contrast to the way the public digest war as a news event in the modern era. That is, the tension between the duty of news journalists to be compassionate (Sanders, 2003) and mindful of taste (Frost, 2000) on the one hand, whilst also respecting the "power that comes through controlling the flow of information" (Bok, 1982, p. 19) on the other, means that the results of requisitioned violent death is rarely exhibited for audiences to observe. Indeed, it has been argued that US news media in particular has increasingly shied away from showing dead or wounded troops, failed military actions, or civilian casualties in its news coverage (Griffin & Lee, 1995; Hallin, 1986; Paletz, 1994; Patterson, 1984; Zelizer, 2004). In an article entitled *The War Without Blood*, Pete Hamill (2004) wrote:

> One fundamental truth of the war [Iraq War, 2003-11] – the killing of human beings – is not getting through. Photographers and television cameramen must surely be among those who feel the most severe

Proceedings of DiGRA 2017

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> frustration. What we get to see is a war filled with wrecked vehicles: taxis, cars, Humvees, tanks, gasoline trucks. We see wrecked buildings, and rescue workers examining rubble. We see wrecked helicopters. We see almost no wrecked human beings … There are no photographs of dead young soldiers. There are very few photographs of the wounded. In short, we are seeing a war without blood (pp. 28, 30, cited in Silock *et al*., 2008).

Sociologist Philip Mellor (1993) has noted, while death may no longer be 'taboo,' "it remains a hidden one in the sense that it is generally sequestrated from public space" (p. 11). Institutionally repressed, death has been removed from the main arenas of life, only to be replaced by death as an entertainment form. Writing in 1955, Geoffrey Gorer observed in his essay entitled *The Pornography of Death* how 'natural death' has increasingly become 'smothered in prudery', whereas violent death has assumed an "ever-growing part in the fantasies offered to mass audiences" (p. 173). A viewpoint that was later taken up by Vicki Goldberg (1998) in her essay *Death Takes a Holiday, Sort of*, in which she stated that "when it came to matters of death, people who were no longer seeing quite so much of it up close learned to accept representations that looked real as a substitute for experience" (p. 30). As an entertainment form games participate in, and contribute significantly toward an established cultural system for dealing with death in which substitution, indifference and fantasy contrive to make the representation of death a distraction and pleasurable form of entertainment. Indeed, when news media report a factual instance of real death, it is presented as "antithetical to social ordinariness" (Walter *et al*., 1995, p. 583). That is, for a death of an unknown citizen to become publicly reported, that death has to be extraordinary, or "the circumstances in which it has occurred is extraordinary" (p. 584). In contemporary Western societies the most common form of death is disease related. Dying is often a lonely and private experience for the individual and their loved ones, handled in an impersonal and professional manner by the medical profession and funeral directors (or 'disabling professions', Illich, 1973) thus removing the need for community involvement.

Walter *et al*. (1995) use the term 'emotional invigilation' to describe the "simultaneous arousal of, and regulatory keeping watch over, the affective dispositions and responses associated with death" (p. 586). The notion of invigilation thus covers both the function of fictionalized representations of death within entertainment, but also external influences that takeover during the process of dying in many Western contexts. To this effect, both aspects of the invigilation of death are explicitly addressed in the 2016 game *That Dragon, Cancer* (Numinous Games), a poignant documentation of a family's experiences supporting their five-year-old son through his fight against cancer, which also ultimately chronicles the medicalization and professionalization of his eventual death. The subject matter of the game is thus, on the one hand, unremarkable as the nature of the death is all too common and routine, but made remarkable on the other hand, by the manner in which the player is invited into the family experience and the intimacy it permits with both its creators and the child who is remembered and portrayed at the centre of the game experience. Unlike the pleasure derived from spectatorship of violent death, which Elisabeth Bronfen (1992) recognizes is an 'aesthetic representation of death' that "lets us repress our knowledge of death precisely because here death occurs at someone else's body and as an image" (p. *X*), *That Dragon, Cancer* foregrounds a likely experience that players of the game will encounter either by losing someone close to them, or the end of their own existence.

Not only does *That Dragon, Cancer* stand in complete contrast to the typical function and representation of death in games, it also captures and reflects the manner in which the occurrence of death has altered over time and how the response of social institutions have contributed to its transformation. Much like games, death for those living between the fifteenth and seventeenth centuries was often sudden and capricious, it could occur at any moment (Walter, 1994). Indeed, medieval *Dance of Death* imagery personified death as a hovering skeleton waiting behind an individual's shoulder or tugging on their coat tails. The imagery functioned as a *momento mori* to reminded individuals of the fragility of life. Koozin (1990) states that such imagery served as a reminder that death "comes as a dancing bare skeleton to seize all men from emperor to peasant" (p. 15). It was not until the 18th Century that the notion of a 'normal' death emerged with knowledge of mortality rates and estimation of life expectancy (Arney & Bergen, 1984) alongside the medicalization of death. As Ivan Illich (1975) argued in *Medical Nemisis*: "We have seen death turn from God's call into a 'natural' event … Death had paled into a metaphorical figure, and killer diseases had taken his place. The general force of nature that had been celebrated as 'death' had turned into a host of specific causations of clinical demise," (p. 139). As a result of the transfer of authority over the dying from the priest to the doctor, and the medicalization of death has meant that dying also became a prolonged process. That is, medicine has become particularly adept at diagnosing diseases without necessarily being able to cure them.

Once it was great pandemics and local epidemics that "influenced the course of wars, determined the fates of nations and empires, and affected the progress of civilization, making infections compelling actors in the drama of human history" (Fauci & Morens, 2012, p. 454). However, once infectious diseases were (temporarily) averted or immobilized[1], genetic diseases such as cancers began to take precedent both changing the nature of medical care and becoming one the most common causes of death (Sudhakar, 2009). While medical knowledge understands cancer, as the changes to genes that control the way our cells function, especially how they grow and divide, there are still many reasons for the failure of cancer treatments that have yet to be solved (Coppers, 1998). Despite medicine's limited ability to treat advanced cancer, it has progressed or adjusted its emphasis to be able to offer palliative care that manages and maintains the patient up until the inevitability of their death. Various drugs can now be used to shrink tumors and temporarily relieve symptoms, slow a cancer's growth and prolonging the lives of some patients. The consequence of such changes is that many individuals 'live with' death long before they die, supported by an industry of support literature, such as *Crazy Sexy Cancer* (Carr, 2007) and *Anti-Cancer: A new way of life* (Servan-Schreiber, 2009).

A shift in how societal institutions intervene in individual experience of death has resulted in the reduction in the centrality of religious assistance in the care of the dying and religious traditions associated with death. Instead, individuals and families come "into contact with bureaucratic institutions that have a force of their own," (Marshall, 1980, p. 159). In an article for the *Guardian*, Emine Saner (2007) writes how in the UK "the General Medical Council places great importance on respecting the religious beliefs of patients, but in cases where parents refuse consent for a child's essential care, doctors can and do go to the courts." More generally however, medicine has rationalized explanations attached to the cause of physical deterioration leading to death, whereas religion can be viewed as "complicated systems of preparation for death" (Jung quoted by Ardelt & Koenig, 2006). As Christians, the developers behind *That Dragon, Cancer* express how they were variously positioned between medicine and their own faith in terms of understanding what was happening to them and their family. Their faith is both

articulated and questioned throughout the game in response to their son's illness, making the game a "poetic meditation on death and hope" for one Christian review site *Christ and Popular Culture* (Valle, 2016). The religious dimension to the game makes *That Dragon, Cancer* an interesting artefact in relation to changes in how death is conducted and expressed in society (discussed further below).

DEATH AND DYING IN GAMES

Entertainment forms appear to revel in death, repeatedly illustrating human finitude over and over again in increasingly creative ways. In doing so, the dramatized, glamorized and trivialized nature of death as entertainment, does not necessarily function to increase individual reflection on mortality as it often lacks connection with individual experiences with/of death (Warschinski & Lemert, 2011). In arcade games, screen death was initially used as an opportunity for players to determine the length of continuous play (or a session of play) before further payment was required, or the player had to step aside and give someone else a turn. As a domestic technology, games have continued to use screen death primarily as punishment for failure, correcting misunderstanding, or functioning to condition behaviour whilst serving to frustrate and inconvenience the player. As Huizinga (1970/1938) argued; "all want to achieve something difficult, to succeed, to end a tension. […] The more play bears the character of competition, the more fervent it will be" (p. 29). The implication here that pleasure increases when the stakes are higher. As Myers (2009) points out, "human experience are accessible only as they are represented and valued by the video game mechanics" (p. 52). To that effect, 'game life' is often expendable, holding a hypothesis-testing value that allows the player to experience the consequences of failed actions as a result of inexpertise, uncertainty, unfamiliarity or unawareness.

Board games designed for multiple players have used the 'elimination' of players from games to determine the winner (e.g. Monopoly). A somewhat similar, albeit temporary, effect is detectable within digital games as well. For example, within the action-RPG digital game *Too Human* (Silicon Nights, 2008), when player-character Baldur (inevitably) dies, a Valkyrie descends from the sky, picks him up and ascends with him. Shortly after, the player respawns, with everything exactly intact as it was pior to death, with no penalty. However, for the duration of the unskippable death animation the player is forced to 'sit out' the game, while the game world carries on without them. A similar experience is provided by *Bioshock* in which life in Rapture continues after you die. This leaves the re-spawned player to retrace their steps and make their way back to the scene of their death, where they will often find their enemies have had time to heal themselves and prepare and position themselves for further confrontations. Such examples, represent a 'life goes on' model of screen death rather than a game over, reset, restart model that is player-centric.

Within the context of player progression *Call of Duty: Modern Warfare 2* (Infinity Ward 2009) opted to severely undermine the 'meaningful' play model that appropriates death, and aligns it with failure to perform or attain goals that define a winning state. In *Modern Warfare 2* the player dies at the end of a section of play that would normally be expressed as a 'winning state'. In the game's infamous 'No Russian' chapter the player is coerced, but ultimately tricked and deceived. Playing as a deep-cover CIA agent, the player is present (as participant or bystander) during the massacre of unarmed civilians in an airport as part of an act of terrorism, which leads to a post-massacre firefight with forces that are quick to respond to the incident. Irrespective of the moral dilemma posed by the massacre scene, player reflex (and the need to avoid screen-death) ensures that, post-

massacre, the player effortlessly picks up with the action once again and fights alongside the terrorists in a more balanced conflict against opposing parties. Having helped to secure the terrorists' extraction from the airport, they then opt to discard the player by executing their player-character. While betrayal from the terrorists does not come as a surprise, betrayal by the game does. That is, fulfilling the tasks of the game typically leads to reward in the form of progression. Failure obviously serves as a contrast to winning – thus making winning more enjoyable. Indeed, Juul (2009) recognizes that "*failure adds content* by making the player see new nuances in a game". It makes players reconsider their strategy, thus making game playing itself more interesting. Here Juul is, referring to the *process* of play. Instead, the player who reaches the end of the No Russian mission succeeds in this regard, but the player character dies regardless, emphasizing to the player how their actions (up until their execution) have been ineffectual in terms of influencing how the game unfolds, or progressing the life of their player-character.

In addition to requiring a player to switch virtual bodies when their player-character experiences narrative death, there are also examples of favored NPCs not always making it to the end of a game. Again, The Call of Duty franchise has shown a penchant for killing off characters. For example, the death of Captain John "Soap" MacTavish in Modern Warfare 3 (Infinity Ward, 2011) warranted its own report on *Kotaku*, which read: "Today marks the passing of one of *Call of Duty*'s finest soldiers. After valiantly fighting his way through nearly three entire *Modern Warfare* games, one Task Force 141 didn't make it back from the October 11, 2016 mission to assassinate terrorist leader Vladimir Makarov." Similarly, when zombie survival franchise Left 4 Dead (Valve Corporation, 2008), was followed up with a sequel, it had all new characters, prompting fans to question the disappearance of Francis, Louis, Bill and Zoey. Whether or not fan reticence for the new cast of *Left 4 Dead 2* (Valve Corporation, 2008) had any influence or not is unknown, but additional downloadable content was then subsequently released for the sequel entitled *The Passing*, containing the subtitle "Nobody Survives Forever." What was notable about this release was how the *Left 4 Dead 2* Survivors join up with three of the Survivors from the original *Left 4 Dead*. The original Survivors are not however playable and have only very minor cameo roles at the beginning and end of the campaign. Nevertheless, *The Passing* explains what has been happening to the original four survivors. Indeed, players learn that the fourth Survivor, who is missing from *The Passing* had to sacrifice himself for the greater good of the group. Bill's story would later get told in further add-on content, *The Sacrifice*.

There are of course a number of examples of games that no longer feel obliged to employ a death mechanic in their design (e.g. *Today I Die*, Benmergui, 2009; *Dear Esther*, *TheChineseRoom*, 2012; *Proteus*, Key & Kanaga, 2013). For example, in indie exploration games such as *Small Worlds* (David Shute, 2009) we find games free of combat - Games that encourage and permit discovery and exploration without systemic failure. Jason Rohrer's *Passage*, discussed by Wardrip-Fruin and Mateas (2009) in the context of operational logic, is another game that does not require failure in a gamic-sense to contemplate life and death. As time passes in *Passage*, the player character inevitably grows old and dies. Player choices become meaningful as some avenues and experiences become blocked during the decision-making process based on what other life choice that are made and pursued. In the more commercially oriented title *Silent Hill: Shattered Memories* (Climax Studios, 2009) developers also opted to use puzzle-based exploration, weaponless chase sequences, and therapy scenes as its core gameplay components. The entire game is non-combative and the player-character remains weaponless for the entire duration of the game. He can only run, hide, slow down the

monsters by knocking down objects to block their path, throw off the creatures if they latch onto him, and temporarily ward them off by picking up and using flares found lying on the ground (Reed, 2009). The game also avoided overusing the threat of possible death of the player-character resulting in a 'game over,' through replacing a 'win' state with 'escape.'

PERSONAL CONFESSIONAL GAMES

That Dragon, Cancer works against the meaningless treatment of death in so many digital games. It too disregards screen-death in a game that explicitly addresses death, following other games (cited above) that have rejected the need for endless pseudo-risk based scenarios. Instead the game explicitly addresses the subject of death, using the medium for personal expression and communication, translating the developers' personal experience and story. The game follows other examples that include *Mainichi* (Mattie Brice, 2013), designed to express to a friend what it is like to be a transgender woman living in San Francisco, and *Depression Quest* (The Quinnspiracy, 2013) which tells the story of the nature of the challenges faced by a person suffering from depression. Like Zoe Quinn's *Depression Quest, That Dragon, Cancer* deals with a diagnosis that often leaves its sufferers encumbered by a social stigma, that leave individuals feeling isolated and marginalised. In both these cases too, sufferers can experience 'social death,' a concept that is used to describe a loss of individual identity from an inability to do the things they once did prior to being incapacitated by illness, which results in a loss of quality of life (Mulkay & Ernst, 1991). In the case of cancer, 'social death' can often occur in advance of 'physical death'. Indeed, the concept of social death has been used to describe how euthinasia functions to bring forward physical death to meet a social death that has already occurred.

In a number of ways *That Dragon, Cancer* is the story of parents Ryan and Amy Green's response to dealing with the illness and eventual loss of their five year-old son, Joel, to a rare and aggressive form of cancer. The short game (two-hour playing time) is part confession, documentary, and tribute. While the time-line of the game follows Joel and his family as they transition from treatment to palliative care, stylistically the game is highly abstract. In this way, the game is able to echo the bewildering, confounding experience of submitting to medical processes post-diagnosis, and then the devastation and numbness associated with having to come to terms with Joel's prognosis. Normal family life is disrupted and refocused around an institutional environment that engenders feelings of helplessness from having to relinquish control to medical processes. In an interview about the game Ryan Green describes the experience of hospitalization as being "alone with 500 families." Because *That Dragon, Cancer* breaks the formula of established gaming experiences, the player is left ill equipped and unable to effortlessly comprehend the demands of each new scene or chapter. In doing so, I would like to argue that the game offers a new game experience rather than dismiss it as an 'interactive narrative.' While making a game might appear to be unlikely way of processing a very harrowing personal experience, Joel's father and the game's designer Ryan Green actually began the game making process in November 2012 when Joel was approaching four years of age. Joel had been diagnosed with cancer just after his first birthday (Tanz, 2016). Nevertheless, Ryan Green explains how "videogames unlike any other mediums allow you to linger in spaces … looking back at the time we spent with Joel it wasn't what he said or it wasn't the event that we remember but those spaces between … I think

videogames allow you to rest in that space better than anything else." The game removes the desire to advance as efficiently and quickly as possible

The success of *That Dragon, Cancer* in changing the scope of games is somewhat evident in the response and coverage it has received in both game-related and mainstream media. An example is provided by Colin Campbell (2016) responding to the game on *Polygon* in which he states: "The idea of giving *That Dragon, Cancer* a review score or of laying it out to the cool, analytical treatment of traditional video games critique seems faintly grotesque." He goes on to explain that: "We spend a great deal of time writing about dudes with guns or happy little cartoon chaps bouncing through wonderlands. Games don't generally feature kids with cancer." Likewise, in an IGN review of the game, Lucy O'Brien (2016) declares that it is "hard to critique in conventional terms." As David Cage, the director of *Heavy Rain* (Quantic Dream, 2010) has commented, "when you look at most games you see today, they are based on patterns, on loops: you always do the same thing, whether you shoot, drive, or jump on platforms" (cited Zagal 2011). In *That Dragon, Cancer* players are present in and around the situation, never fully adopting a defined role, but assuming and shouldering a number of different perspectives. The player's responsibilities remain vague and appropriate responses to its various scenarios require the player to overcome any discomfort or unease that pervades many 'death-denying' cultures. The player assumes various perspectives throughout the game, beginning as a duck that is being fed by Joel (that allows you to overhear Ryan and Amy explaining the association between Joel's illness and his developmental delays to his siblings), as doctors, Ryan (Dad) and Amy (Mom), or an unspecified person who is available to offer Ryan some respite from caring for Joel, play with Joel, or simply on hand to listen to Ryan and Amy, or bear witness to their experiences within the hospital. Some of the roles are light and playful (simply playing with Joel and causing him to laugh), game-like (e.g. the Mario Kart-esq ride around a hospital floor, or the 2-D scroller and allegory of Dragon v. Knight) while others are somber and upsetting to bare witness to (e.g. the Dehydration Chapter, in which is extremely difficult to comfort Joel or ease his distress).

In response to the way Western societies now deal (or don't deal) with death, adult death has begun to take a different turn with individual's expressing a greater desire to have more control over the manner in which they leave the world, how their passing is marked, and life remembered. Walters (1993) argues that 'socially prescribed rituals' are diminishing leading to a change in the concept of 'good' death to one that reflects what the individual wants (Lichter, 1991). Doka (2013) also argues that there is increasing realisation and rejection of the term 'patient,' because at its root meaning it denotes 'someone being acted on.' Indeed, he retells the stance taken by one of his colleagues dealing with terminal illness who opted to refer to herself as a 'protagonist' in order to clarify how she intended to set the pace and direction of her ensuing drama, and avoid the stigma of being a victim of illness. Such changes in attitude towards the level of control desired and exerted over the process of passing away are reflected in Shneidman's (1973) notion of a post-self, which acknowledges human concern for how others will see us and continue to think of us after we have gone. Such considerations relate to "the concerns of the living individual" (p. 45) thus reflecting future-oriented thinking and conscious thought, effort and planning. It is already the case, however, that in an era of virtual presence and social networks, "technologies duplicate the indicies of physical presence" (Botelho, 2011), giving individuals a presence separate from the body, both in life and death. In the case of *That Dragon, Cancer* Joel is a young child oblivious to adult concerns associated with constructing a post-self. However, the game stands as a

testament to his experience and his impact upon the lives of others. Through the game, Joel's impact and self is further extended, and his memory distributed via a dematerialized, re-embodied version of him (Belk, 2013). That is, we are let into what is undoubtedly the most tragic moment of the Green family's lives through a digital artifact that is intimate in its preservation of the memory of their son and the time they shared together.

At the 2016 *Game Awards*, Ryan Green accepted the award for 'Games for Impact,' a socially conscious award focused on games with a message. In his acceptance speech he commented: "You let us tell the story of my son Joel. In the end, it was not the story that we wanted to tell. But you chose to love us by being willing to stop and to listen and to not turn away. To let my son Joel's life change you because you chose to see him and to experience how we loved him." During the game, in a chapter entitled 'Waking Up', Amy (Joel's Mom) discusses a possible-future for Joel as she cradles him while he comes around after treatment. In this self-referential and self-conscious scene Amy considers the prospect of *That Dragon, Cancer* not being Joel's definitive public post-self - his memorial. She states to Joel that "cancer will be such a small part of all you could grow to be. You will tire of hearing about it. You won't want to see the cards and notes I saved. I'll hold the memories of this hard day. You, just leave it behind."

CONCLUSION

That Dragon, Cancer is a significant game text for both the way it reflects on death in contemporary Western society but also the how it exploits the affordances of the medium in such a compelling manner. There is no win state. Like most who have played this game, the author of this paper came to the game with full knowledge of the circumstances surrounding the game's development. However, the game also tells you all you need to know up front. To this effect, the motivation to progress rapidly is eliminated and the player decelerates the pace of the game on his or her own accord. Instead, there is a much greater desire to dwell in its spaces, to cherish the moments you spend with Joel, and fend off the inevitable. The game allows the player to contemplate and recognize the loss and the gains that the game presents. *That Dragon, Cancer* is both a highly personal, yet universal story (as evidenced by the readable bereavement cards scattered throughout the hospital ward, that were written by the game's kickstarter funders). As Ryan Green states: 'so much of life isn't so much about the answers, but about walking with each other in the midst of not knowing the answers." To this effect, the game directly confronts modern death head on. As Ariés (1981) has noted: "The death of a patient in the hospital, covered with tubes, is … more terrifying than the skeleton of macabre rhetoric" (p. 614).

ENDNOTES

[1] Tuberculosis, dengue fever, cholera, and malaria have all re-emerged alongside other infectious diseases such as legionnaire's disease, lyme disease, HIV/AIDS, ebola, SARS, etc.

BIBLIOGRAPHY

Ardelt, M. & Koenig C.S. "The Role of Religion for Hospice Patients and Relatively Healthy Older Adults," in Research on Aging vol. 28, no. 2 (2006) pp.184-215.

Ariés, P. The Hour of Our Death, Allen Lane, London, 1981.

Arney, W.R. & Bergen, B.J. Medicine and the Management of Living, University of Chicago Press, Chicago, 1984.

Belk, R.W. "Extended Self in a Digital World," in Journal of Consumer Research, vol. 40 (2013) pp. 477-500.

Bok, S. Secrets: On the Ethics of Concealment and Revelation, Pantheon Books, New York, 1983.

Botelho, R. "Do We Really Die? Bodies in Cyberculture: Life and Social Existence After Death," in *Visions of Humanity in Cyberculture*, *Cyberspace and Science Fiction,* 6th Global Conference, 12th-14th July, Oxford, UK, 2011.

Bronfen, Elisabeth. 1992. *Over Her Dead Body: Death, Femininity and the Aesthetic*. Manchester: Manchester University Press.

Campbell, C. "That Dragon, Cancer: Review, *Polygon"*, available from: http://www.polygon.com/2016/10/6/13189080/that-dragon-cancer-mobile, 2016.

Carr, K. *Crazy Sexy Cancer Tips*, Skirt!, Guilford, CT, 2007.

Coppes, M.J. "Cancer: Why Chemotherapy Fails," in *The Lancet*, vol. 352, no. 9135, (1998), p. 1232.

Doka, K. J. Counseling Individuals with Life Threatening Illness (2nd Edition), Springer Publishing, 2013.

Fauci, A. S. and Morens, D. M., "The Perpetual Challenge of Infectious Diseases," in New England Journal of Medicine, vol. 366, (2012), pp. 454-461.

Frost, C. Media Ethics and Self-Regulation, Pearson, London, 2000.

Goldberg, V. "Death Takes a Holiday, Sort Of," in Why We Watch: The Attractions of Violent Entertainment, edited by Jeffrey H. Goldstein, Oxford University Press, New York, 1998.

Griffin, M. & Jongsoo L. "Picturing the Gulf War: Constructing an Image of the War in Time, Newsweek, and U.S. News & World Report," in Journalism & Mass Communication Quarterly, vol. 72, no. 4, (1995), pp. 813–25.

Groer, G. "The Pornography of Death," in Death, Grief, and Mourning in Contemporary Britain, edited by G. Groer, The Cresset Press, London, 1955.

Hallin, D.C. The 'Uncensored War': The Media and Vietnam, University of California Press, Berkeley, CA, 1986.

Hamill, P., The War Without Blood, in Quill, (Sep 2004), p. 24.

Huizinga, J. Homo Ludens: A Study of the Play-element in Culture, Beacon Press, Boston, MA, 1955.

Illich, I. Medical Nemesis: The Expropriation of Health, Pantheon Books, New York, 1975.

Juul, J. "Fear of Failing? The Many Meanings of Difficulty in Video Games," in The Video Game Theory Reader 2, edited by M.J.P. Wolf and B. Perron, Routledge, New York, 2009.

Koozin, K. The Vanitas Still Lifes of Harmen Steenwyck: Metaphoric Realism, Edwin Mellen Press, Lewiston, NY, 1990.

Proceedings of DiGRA 2011 Conference: Think Design Play.

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Lichter, I. "Some Psychological Causes of Distress in the Terminally Ill," in *Palliative Medicine*, vol. 5, (1991), pp. 138-46.
Marshall, V.W. Last Chapters: A Sociology of Ageing and Dying, Brooks/Cole, Monterey, CA, 1980.
Mellor, P.A. "Death in High Modernity: The Contemporary Presence and Absence of Death." in Special Issue: Sociological Review Monograph Series: The Sociology of Death: Theory, Culture, Practice, edited by David Clark, vol. 40, no. 1 (1992), pp. 11-30.
Mulkay, M. & Ernst, J. "The Changing Profile of Social Death," in *Archives of European Sociology*, vol. 23, (1991), pp. 172-96.
Myers, D. "The Video Game Aesthetic: Play as Form," in The Videogame Theory Reader 2, edited by B. Perron and M.J.P. Wolf, Routledge, New York, 2009.
O'Brien, L. "That Dragon, Cancer Review," in IGN, available from: http://au.ign.com/articles/2016/01/15/that-dragon-cancer-review, 2016.
Paletz, D.L. "Just Deserts?" in Taken by Storm: The Media, Public Opinion, and U.S. Foreign Policy in the Gulf War, edited by L.W. Bennett, and D.L. Paletz, The University of Chicago Press, Chicago, IL, 1994.
Patterson, O. "Television's Living Room War in Print: Vietnam in the News Magazines," in Journalism Quarterly, vol. 61, no. 1 (1984), pp. 35–39.
Reed, K. "Silent Hill: Shattered Memories Review," in Eurogames, (December 8, 2009).
Sanders, K. Ethics & Journalism, Sage, London, 2003.
Saner, E. "Keeping the Faith: When Medical Ethics Clash with Religious and Cultural Mores," in The Guardian, Tuesday 20 March 2007.
Shneidman E. Death of Man, Quadrangle, New york, NY, 1973.
Servian-Schreiber, D. Anti-Cancer: A New Way of Life, Michael Joseph Ltd, London, 2008.
Silcock, W.B., Schwalbe, C.B. and Keith, S. "Secret' Casualties: Images of Injury and Death in the Iraq War Across Media Platforms," in Journal of Mass Media Ethics: Exploring Questions of Media Morality, vol. 23, no. 1 (2008), pp. 36-50.
Sudhakar, A. "History of Cancer, Ancient and Modern Treatment Methods," in Journal of Cancer Science Therapy, vol. 1, no. 2 (2009), pp. 1–4.
Tanz, J. "Playing for Time," in *Wired,* available from: https://www.wired.com/2016/01/that-dragon-cancer/, 2016.
Valle, N. "Suffering Beautifully with *That Dragon, Cancer,"* in CAPC: Christ and Popular Culture. Available from: https://christandpopculture.com/a-time-to-weep-suffering-beautifully-with-that-dragon-cancer/, ,January 19, 2016.
Walter, T. The Revival of Death, Routledge, London, 1994.
Walter, T., Littlewood J., & Pickering. M. "Death in the News: The Public Invigilation of Private Emotion," in Sociology, vol. 29, no. 4, (1995), pp. 579–96.
Warschinski, T. & Lemert, C. "Identity, Mortality and Death," in *Routledge Handbook of Identity Studies*, edited by A. Elliott, Routledge, London, London, 2011.
Zagal, J. "Heavy Rain: Morality the Quotidian, in Inaction, and the Ambiguous." in Vice City Virtue: Moral Issues in Digital Game Play, edited by K. Poels and S. Malliet, Acco Academic, Leuven, 2011.
Zelizer, B. "Introduction: On Visualizing the Holocaust," in Visual Culture and the Holocaust, edited by B. Zelizer, Rutgers University Press, New Brunswick, NJ, 2001.